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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,099	08/04/2003	William Troy Tack		5866

7590 01/12/2005

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EXAMINER	
MORILLO, JANELL COMBS	
ART UNIT	**PAPER NUMBER**
1742	

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/634,099	TACK ET AL.	
	Examiner	Art Unit	
	Janelle Combs-Morillo	1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 August 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rogers, Jr et al (US 3,984,259).

Rogers teaches a method of working and heat treating an aluminum alloy with 5.2-6.2% Zn, 1.9-2.5% Mg, 1.2-1.9% Cu, 0.18-0.25% Cr, balance aluminum (abstract) by casting a billet, homogenizing, extruding into starting stock for impact extrusion, annealing, impact extruding, solution heat treating, quenching, and aging (column 2 lines 35-45, column 3 lines 66-67, column 4 lines 1-2). Rogers teaches the annealing prior to impact extruding is necessary to soften the alloy prior to subsequent forming which helps eliminate defects (column 4 lines 14-20, column 5 lines 53-60). Rogers does not teach 0.02-1.0% of at least one element selected from Zr, Sc, Mn, Ti, Hf. However, Cr, which is mentioned in the specification as a dispersoid forming element (see [015]) meets said limitation.

Rogers does not mention a YS of ≥ 85ksi (claims 1, 6, 11) or a YS of ≥ 90 ksi (claims 2, 7, 12). The examiner asserts that where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a

sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Because Rogers teaches substantially the same working and heat treatment steps performed on an overlapping alloy composition, then substantially the same mechanical properties, such as YS, are also expected to occur. Therefore it is held that Rogers has created a prima facie case of obviousness of the presently claimed invention.

Concerning claims 3, 4, 9, 14, as stated above, Rogers teaches substantially the same working and heat treatment steps as presently claimed.

Concerning claims 5, 10, and 15, which mention machining, Rogers teaches machining prior to impact extrusion, which facilitates further metal forming (column 5 lines 67-68, column 6 lines 1-2).

Concerning claims 8 and 13, which mention impact extruding in multiple steps with intermediate annealing in-between, Rogers teaches cold working in multiple steps (see Fig. 2-6), wherein intermediate annealing (column 6 lines 43-44) occurs in-between said working steps. Rogers does not specify impact extruding in multiple steps, however, because Rogers does teach interannealing between cold working stages (which is known in the art to provide stress relief), then it would have been obvious to one of ordinary skill in the art to interanneal between multiple impact extruding steps.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686

F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-15 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 of U.S. Patent No. 6,627,012 B1 (hereinafter US'012) in view of "Aluminum and Aluminum Alloys" p 262-265.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of US'012 teach a method of homogenizing, extruding, forging, solution heating, and aging an Al-Zn alloy that substantially overlaps the instant alloying ranges, and obtains a YS>90 ksi (see esp. claims 1, 2, 4). The claims of US'012 do not mention annealing or working the starting stock by impact extruding. However, "Aluminum and Aluminum Alloys" teaches that impact (or cold) extrusion is a cost effective way to form intricate parts (p 262 2nd column). "Aluminum and Aluminum Alloys" further teaches that slugs for said impact extrusions can be extruded profiles (p 264, 1st column) that are preferably annealed prior to impact extruding (p 262, 2nd column). It would have been obvious to perform steps of annealing and impact extruding (wherein said extruding is within the broader category of "forging", as taught by the claims of US'012), substantially as taught by "Aluminum and Aluminum Alloys", because "Aluminum and Aluminum Alloys" teaches that nearly all aluminum alloys can be cold extruded (p 262 column 2), and cold extrusion is a cost effective way to form intricate parts.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janelle Combs-Morillo whose telephone number is (571) 272-1240. The examiner can normally be reached on 8:30 am- 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GEORGE WYSZOMIERSKI
PRIMARY EXAMINER

JCM
December 29, 2004